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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,739	05/10/2007	Michele Bortolini	33543A	8713

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CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 104/3
EAST HANOVER, NJ 07936-1080

EXAMINER
BETTON, TIMOTHY E

ART UNIT	PAPER NUMBER
1617	

MAIL DATE	DELIVERY MODE
01/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,739	BORTOLINI, MICHELE	
	Examiner	Art Unit	
	Timothy E. Betton	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 7-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☒ Claim(s) 7-16 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 7 August 2007, 1 sheet.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention.

As stated in MPEP 2164.01(a), "There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is undue."

In re Wands, set forth the following eight factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph:

1. The nature of the invention;
2. The state of the prior art;
3. The predictability or lack thereof in the art;
4. The amount of direction or guidance present;
5. The presence or absence of working examples;
6. The breadth of the claims;
7. The quantity of experimentation needed; and
8. The level of the skill in the art.

The presently claimed invention is directed to a pharmaceutical composition for the *prevention or treatment* of metabolic syndrome consisting of fluvastatin or pitavastatin or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier. The presently

claimed invention is further drawn to a method for the prevention or treatment of metabolic syndrome comprising in administering a pharmaceutical composition to the patient, wherein the pharmaceutical composition consists of fluvastatin or pitavastatin or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.

In view of the claimed invention, it would not be so apparent to the skilled artisan that the presently claimed subject matter could be practiced without undue experimentation. Particularly, the skilled artisan would not accept on the face that the prevention of metabolic syndrome could be achieved based on the disclosure within the instant specification and claims. Based on the state of the art, the skilled artisan would have only been inclined to recognize a treatment of metabolic syndrome and such conditions.

The instant claims are delineated to methods of treatment and prevention of metabolic syndrome. Thus, according to this limitation, the skilled artisan would instantly recognize enablement via the administration of fluvastatin and pitavastatin, wherein the metabolic syndrome is associated with resistance to insulin-mediated glucose uptake, glucose intolerance, hyperinsulemia, increased LDL-cholesterol, increased VLDL and triglycerides, decreased HDL-cholesterol, increased plasminogen activator inhibitor-1 (PAI-l) levels and hypertension. However, the present specification is absent of any direction and/or guidance as to how to use these compositions for the prevention and treatment of metabolic syndrome. The skilled artisan would not be provided with adequate direction and or guidance drawn to the prevention and treatement of any other agents in the particular class of agents as claimed in instant invention. Accordingly, enablement would not be so apparent, recognizable, or interpreted as such, without the representation of calculable data or cumulative results seen with the administration of statins.

Clear delineation drawn to treatment and prevention, respectively, of metabolic syndromes is silent in the specification. Specific and particular embodiments drawn to prevention (particularly) and treatment via administration is again silent in the present specification.

The study of metabolic syndrome is a complex art due to the variable etiologies contributing to the condition. The specification lacks representations of its claimed inventive objective and thus is viewed as lacking an enabling disclosure of the entire scope of the invention.

Furthermore, it is well-established in the art of biopharmaceutics, pharmacokinetics, and pharmacology at the time of the present invention that even compounds that share similar structural properties will not necessarily produce the same level of activity, i.e., potency, mechanism of action, dissolution rate, etc.

The well-recognized unpredictability in the art must be taken into consideration when determining whether the disclosure within the instant specification provides sufficient enabling direction toward the prevention and treatment for metabolic syndrome. In the instant case, there is absence of any such direction in the specification and claims. Essentially, the specification requires embodiments with clear and definite delineations drawn to the actual prevention and/or treatment of disease.

Applicants' inventive objective drawn to fluvastatin or pitavastatin does not sufficiently explain or describe the distinct pathophysiological variances in specific metabolic syndromes. Set aside from the fact that there are no representative methods of treating as disclosed in instant claim 1, there are no target populations with predetermined factors elucidated via data to support or suggest prevention as claimed.

The state of the art, characterized by criteria to determine metabolic syndrome, is well-known in the art. However, it has not been sufficiently established in the instant specification that treatment or prevention of three or more of the factors disclosed in instant claims 9, 10, 14, and 15 could be achieved. According to the MPEP, Working models are not required but in the instance of the present invention, sufficient representative models or extrapolations drawn to patients in need (or predetermined to be in need) of such treatment is absent.

Further, for exemplification of the state of the art, The American Heart Association states [that] [t]here are no well-accepted criteria for diagnosing the metabolic syndrome. The criteria proposed by the National Cholesterol Education Program (NCEP) Adult Treatment Panel III (ATP III), with minor modifications, are currently recommended and widely used.

The American Heart Association and the National Heart, Lung, and Blood Institute recommend that the metabolic syndrome be identified as the presence of three or more of these components:

- Elevated waist circumference:
  Men — Equal to or greater than 40 inches (102 cm)
  Women — Equal to or greater than 35 inches (88 cm)
- Elevated triglycerides:
  Equal to or greater than 150 mg/dL
- Reduced HDL ("good") cholesterol:
  Men — Less than 40 mg/dL
  Women — Less than 50 mg/dL
- Elevated blood pressure:
  Equal to or greater than 130/85 mm Hg
- Elevated fasting glucose:
  Equal to or greater than 100 mg/dL

Metabolic Syndrome (online), retrieved 01/03/08, retrieved from http://www.american heart.org/presenter.jhtml?identifier=4756, printed pages 1-3, especially pages 1 and 2.

In the light of the above, the burden of undue experimentation would be required in order to execute the full scope of the subject matter as presently claimed. The basis for the present rejection is not simply that experimentation would be required, since it is clear from the state of the pharmaceutical and chemical arts that experimentation in this particular art is not at all uncommon, but that the level of experimentation required in order to practice this aspect of the invention in the absence of any enabling direction by Applicant would be undue.

As the cited art and the disclosure above establishes, practicing the claimed pharmaceutical composition and method in the manner disclosed by the applicant would not incline the skilled artisan with a reasonable expectation that the treatment and the prevention of metabolic syndrome could be achieved as claimed. Applicants' claimed invention does not adequately establish enablement due to undue experimentation that would be required in order to practice the entire scope of claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy E. Betton whose telephone number is (571) 272-9922. The examiner can normally be reached on Monday-Friday 8:30a - 5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ardin H. Marschel 1/4/08

ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER

TEB